U.S. Army Corps
of Engineers
Wilmington District

Hatteras Ocracoke GIS

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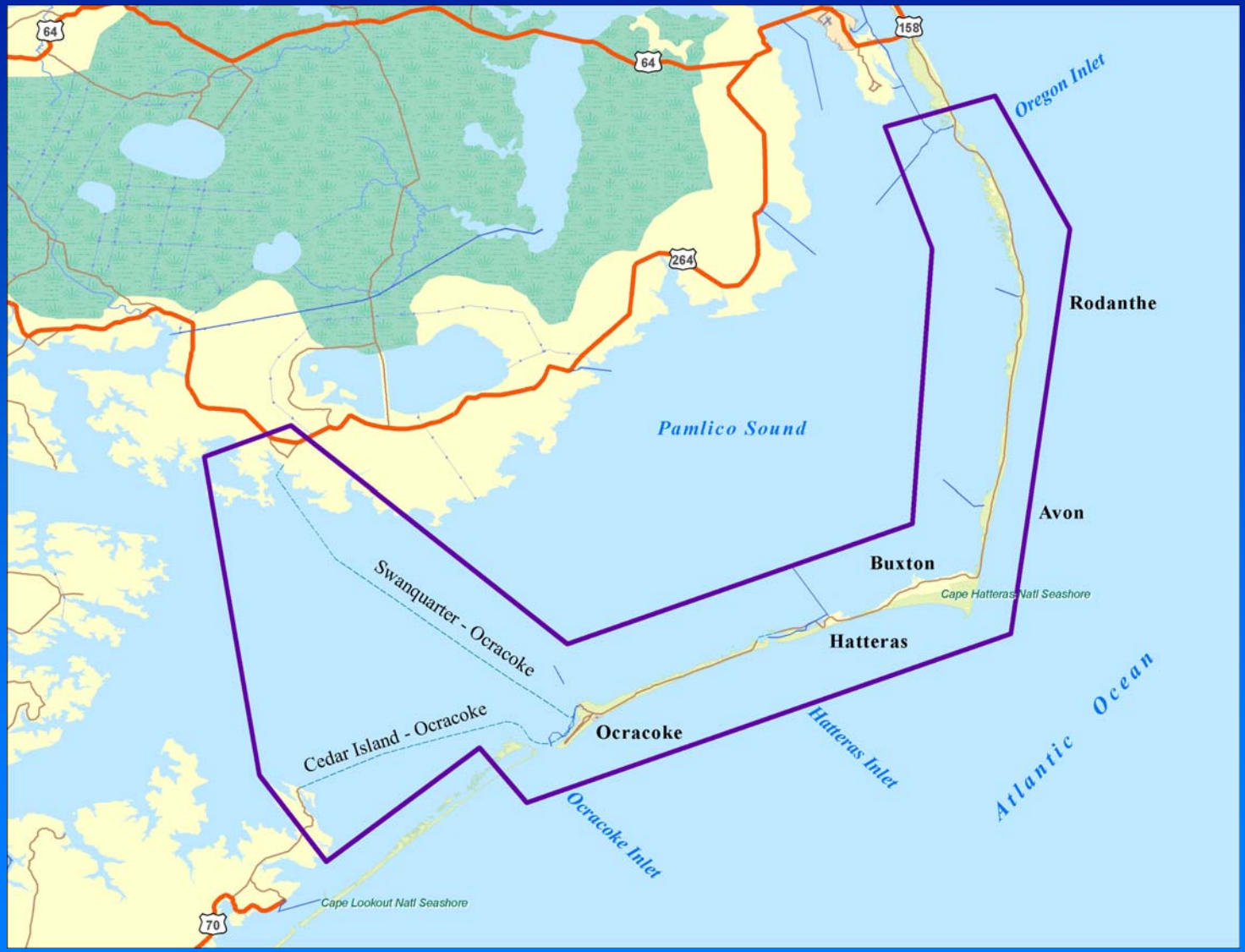

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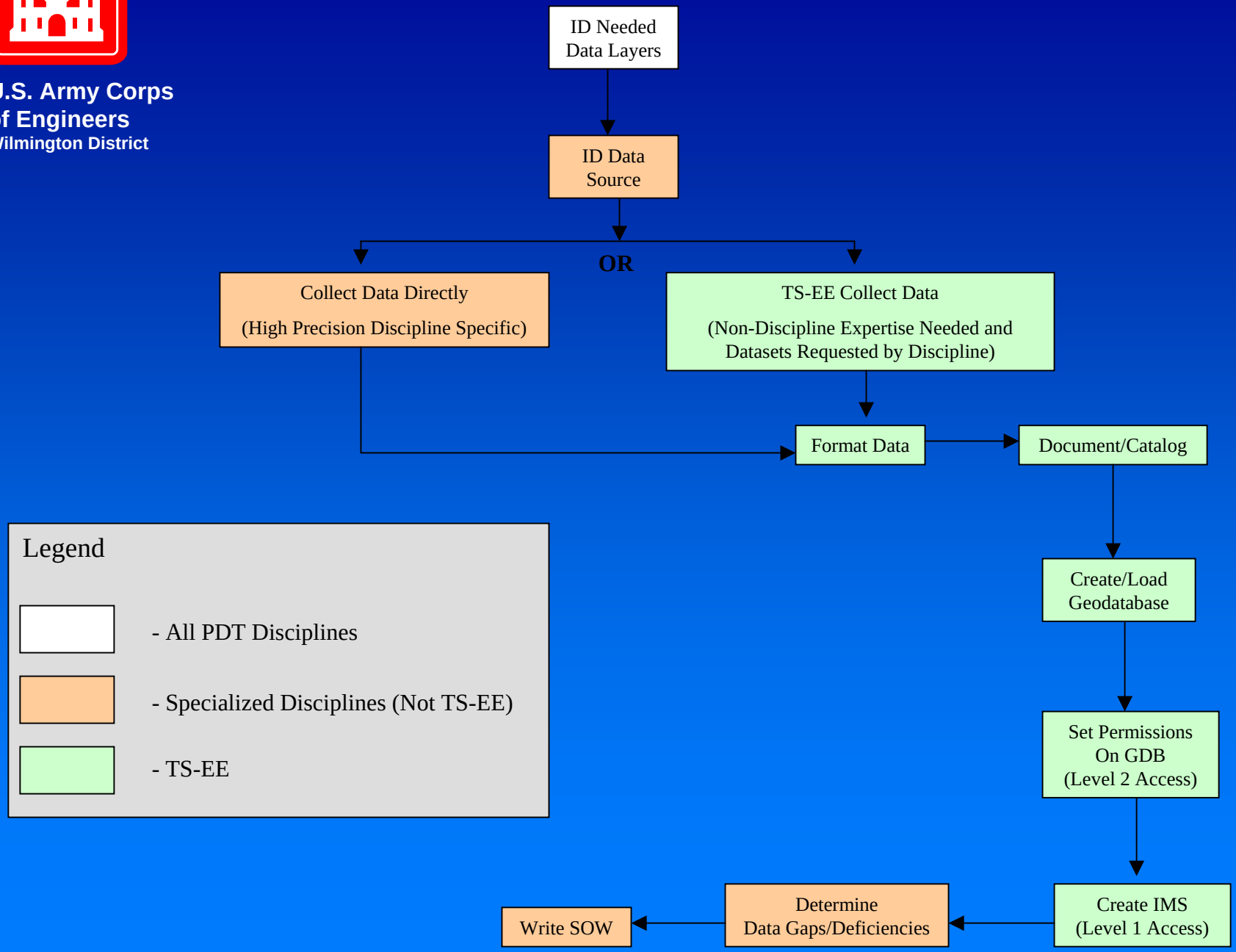

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Spatial Data Requirements

Purpose:

- To maintain logical consistency and integrity of Geographic Information Systems (GIS) data
- Facilitate the construction of project Geodatabase (GDB)
- Enable sharing of data across disciplines
- Provide confidence in the spatial analysis performed by those disciplines

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Spatial Data Requirements

- Data Format
- Datum, Coordinate System, Units of Measure
- Database Content and Schema Guidelines
- Metadata

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Spatial Data Requirements

Data Format:

ESRI ArcView/ArcInfo 9.0

- Personal GDB
- SDE/SQL Server GDB
- Shapefile
- DEM
- TIF/TFW
- JPG/JPW
- MrSid

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Spatial Data Requirements

Datum, Coordinate System, Units of Measure:

- Horizontal Datum = WGS 1984
- Coordinate System = Geographic
- Horizontal Units = Decimal Degrees
- Vertical Datum = NAVD 1988
- Vertical Units = Feet and Tenths of Feet

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Spatial Data Requirements

Database Content and Schema Guidelines (Vector Data):

- USACE project data will comply with the Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE) attribute structure and naming conventions

- Data produced and maintained by other Federal, State, and Local agencies may be retained and used in their native format

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Spatial Data Requirements

Metadata:

ESRI ArcView/ArcInfo 9.0

- **Federal Geographic Data Committee (FGDC) compliant metadata**
- **Metadata of compiled data will be available online**

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Accessing The Data

Access Levels:

- Level 2 Users will be PDT members that are USACE employees with GDB connections
- Level 1 Users will be all PDT members, both USACE and non-USACE through an Internet Map Service

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Accessing The Data

Level 2 Users:

- Direct USACE network connection to GDB
- Some write, some read only
- Firewall and Security issues prevent extending these privileges beyond DOD

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Accessing The Data

Level 1 Users:

- Internet Map Service Connection
- ArcIMS or WMS (TBD)
- Level 1 Users can investigate data through web browser, no GIS software required
- Level 1 Users can add IMS or WMS to own GIS Projects

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Status

Data Gathering Phase:

- ID Needed Data Layers – Initial Complete
- Create/Load GDB – SDE/SQL vector GDB created
  50% B-map layers collected, 35% loaded
- GDB /Level 2 Access – In Progress
- Create IMS/Level 1 Access – Test Completed
- Metadata Service – Under Review

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Data Layers

Base Map Layers	Priority 1	Priority 2
City Boundaries	X	
County Boundaries	X	
Federal Lands	X	
CBRA Zone	X	
Transporation - Listed Below	X	
Roads	X	
Bridges	X	
Ferry	X	
Hurricane Evacuation Routes	X	
Navigation Channels	X	
Public Access		X
Upland Disposal Areas		X
Beach Disposal Areas		X
Imagery	X	
Utilities		X
Survey Control/Monumentation		X
Off Road Vehicle Access		X
Boat Docks/Marinas		X
Study Area(s)	X	
Navigation Hazard Areas		X

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Data Layers

Biological Layers		
Vegetation		X
Land Use		X
Land Coverage	X	
Wetlands	X	
SAV (Submerged Aquatic Vegetation)	X	
Essential Fish Habitats	X	
Threatened/Endangered Species	X	
Hard Bottom Areas		X
Fish & Wildlife Boundaries	X	
NPDES Locations (Wastewater Discharge Locations)		X
Water Quality/Classification	X	
Cultural Resources Layers		
State Historical Sites	X	
Shipwrecks	X	
Reefs/Artificial Reefs		X
Protected Cultural Resource Areas		X
Geotechnical Layers		
Boring Logs	X	
Laboratory Test Data	X	
Geophysical Data	X	
Geological Reports/Maps	X	

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Data Layers

Economic Layers		
Houses/Structures	X	
Tax Parcels/Data	X	
Traffic Counts	X	
NPS Visitation	X	
People/Beach Use		X
Census Data	X	
Current Ferry Usage - Summer/Winter		X
Economic Breach Impact from Isabel		X
Occupancy Tax Records		X
Restaurant Receipts Records		X
Historic Damage by Storms		X
Automobile Registration		X
Fish Landings		X
Boat Registration		X
Charter Boats		X
Visitation Studies		X
Input-Output Type Economic Studies		X

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Data Layers

Coastal Layers		
Lidar Data	X	
Storm Paths		X
Impervious Surfaces		X
NOAA 10 yr. Mean High Tide Line		X
State Erosion Data (Not Just Rates)	X	
Shorelines (Current & Historical)	X	
Historical Fill Placements		X
Topography		X
100 Year Flood Line		X
Bathymetry	X	
Storm Surge		X
Wave Gage Locations		X
Wave Gage Data		X
Profile Data	X	
Wind Data		X
Water Level Data - Ocean & Sound	X	
Updated CAMA Flood Zone Mapping	X	

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Data Layers

HTRW Layers		
Contaminated Areas (known or suspected)		X
Landfill Areas (active and inactive)		X
Sewage Treatment Plants		X
Unexploded Ordinance Areas		X
UST Locations		X
Septic Tank Permits		X
Well Locations		X

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Data Exchange

Portable Media:

- Electronic Transfer: FTP, E-mail
- Removable Disc: CD, DVD
- Portable Hard Drive: 300 Gig Maxtor

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